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region is electrically floating when the region is not directly connected to any external connections. The Applicants respectfully disagree.

Attached please find a copy of a page from the *Illustrated Dictionary* of Electronics by Stan Gibilisco (7th Ed.), which includes the dictionary meaning for "floating" (see the highlighted part), the relevant explanation includes "an ungrounded device or circuit that is not connected to a source of voltage" or "not loaded or driven" or "not fixed in position". These explanations are quite consistent with the explanation provided by the Applicants, i.e. no DC power (or a source of voltage) being coupled to the region. As a result, the voltage level at the P-type doped region floats within a range and is not at a set value.

According to MPEP 2111.01, an applicant may be his or her own lexicographer as long as the meaning assigned to the term is **not repugnant** to the term's well known usage. The Applicants' explanations here and in the last response are certainly not repugant to the term's well known usage, as exemplified by the dictionary meaning of "floating" quoted in the last paragraph. Moreover, the Applicants' definition of "electrically floated" is consistent with the definition of "floating well" in US Patent No. 6,154,059, No. 5,907,249, No. 5,844,425, No. 6,147,511, No. 6,414,518, No. 5,969,541, No. 5,151,619, No. 5,576,635, No. 6,333,643, No. 5,543,733, No. 6,344,758, No. 6,407,790 and No. 5,635,861. If the Examiner believes that the well-known meaning of "electrically floating" is different from the Applicants' definition, he is respectfully request d to present **evid nc** (such as a copy of pages in a dictionary or a t xtbook) to prove that the meaning assigned to the term is repugnant to the term's well

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known usage.

At page 8, lines 11-14 of the specification, it is disclosed that "the p-type doped region 30 is in an electrically floated state such that the equivalent circuit of the pull down circuit comprises resistor R<sub>n</sub> and MOS N1 only." At page 7, lines 21-23, the specification discloses that an "optional capacitor C<sub>n</sub> is coupled between the pad or the n-type doped region 20 and the p-type doped region 30." The Applicants believe that after reading the disclosure of the present application, a person having ordinary skill in the art will be quite clear that "electrically floated" as defined in the present application does not mean that "the region is not directly connected to any external connections", as suggested by the Examiner. However, if necessary, the Applicants are willing to cooperate and add a specific definition of "electrically floated" (as explained above) into the specification. The Applicants believe that it is not new matter because that definition is well-known in the art, as exemplified by the dictionary definition quoted above.

Generally, an element can be coupled to the electrically floated p-type doped region and does not destroy its electrically floated region if no DC coupling between the p-type doped region and any power supply is introduced. Consequently, the p-type doped region is still in the electrically floated state even if a capacitor is coupled to the p-type doped region because no DC coupling would occur between the p-type doped region and the power supply.

In addition, when a capacitor is coupled between any two conductors,

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this capacitor does not affect the voltage levels at these two conductors because it only stores the voltage difference therebetween. Therefore, even if a capacitor  $C_n$  is coupled between a pad 20 and the first doped region 30, the capacitor  $C_n$  does not affect the voltage level at the first doped region 30 when the DC power is applied to the IC chip. Thus, the voltage level at the P-type doped region 30 still floats within a range and is not at a set value. Thus, the feature that a capacitor is coupled between a pad and the first doped region (as recited by claims 2 and 38) does not conflict with the feature of the first doped region being electrically floated.

## 35 USC 102(b) Rejections

In sections 5-6, the Examiner rejects claims 34-35 and 37 under 35 USC 102(b) as being anticipated by Ham (US Patent No. 5,903,420). This rejection is respectfully traversed.

Ham does not disclose, suggest, or teach, *inter alia*, the following features recited by claim 34 of the present application:

"a third doped region of the first conductive type, electrically floated in the well region, wherein the first node is electrically coupled to the first doped region and the second node is electrically coupled to the second doped region."

The Applicants believe that once the dispute regarding the definition of "electrically float d" is r solved, it is quite clear that the doped region 46 of

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Ham is not an electrically floating region (at least according to the definition of the present application). As mentioned in the last response, the doped region 46 in Ham is coupled to  $V_{SS}$  through the region 40 and the P-well if the region is P-type. If 0V is applied to the regions 40, 42, 50 and 54, at this time the **voltage level at the region 46 is limited to a set value, not a floating value**. Thus, the Applicants believe that region 46 is clearly not electrically floated.

In the present application, however, the DC power is not coupled to the region 30 because a PN junction (depletion capacitor) is linked between the region 30 and the N-well. Therefore, if no DC power is applied to the pad and the p-type region 28, the voltage level at the floated doped region 30 is not limited to a set value and can float within a range such as -1, -2 volts or the like.

In section 10 of the Office Action, the Examiner asserts that the "criteria for whether a region is an electrically floating region is whether the region is directly connected to any external connections." Again, the Examiner is respectfully requested to provide evidence to support this assertion. Otherwise, the Examiner's definition only represents his own understanding of the term, not the general understanding for people having ordinary skill in the art. For example, it seems that Ham nowhere suggests that the doped region 46 is floated. It is only the Examiner's understanding that such region is electrically floated.

Even if the well-known definition of "electrically floated" is the same as the definition from the Examiner (that the region is not directly

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connected to any external connections), the Applicants believe that it is quite clear from the description of the present application that the definition of "electrically floated" as used in the present application means that there is no DC power coupled to the region or that the region is not connected to a source of voltage. If necessary, the Applicants are willing to add this specific definition into the specification to avoid misunderstanding of the phrase "electrically floated."

The Applicant has attempted to address all of the issues raised by the Examiner in the Office Action as the Applicant understands them. The Applicant believes that the Application is now in condition for allowance. If any point requires further explanation, the Examiner is invited to telephone Troy Cai at (323) 934-2300 or e-mail Troy Cai at tcai@ladasparry.com.

The Commissioner is authorized to charge any additional fees which may be required or credit overpayment to deposit account No. 12-0415. In particular, if this response is not timely filed, then the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136 (a) requesting an extension of time of the number of months necessary to make this response timely filed and the petition fee due in connection therewith may be charged to deposit account no. 12-0415.

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Enclosed please find a copy of Troy Guangyu Cai's Notice of Limited Recognition under 35 CFR 10.9(b) to prepare and prosecute patent applications wherein the patent applicant is a client of Ladas & Parry, and the attorney of record in the applications is a registered practitioner who is a member of Ladas & Parry.

transmitted to the Patent and Trademark Office (Fax No. (703)308-7722) on

March 28, 2003
(Date of Deposit)

Troy Guangyu Cai
(Name of Applicant, Assignee or Registered Representative)

(Signature)

I hereby certify that this correspondence is being facsimile

Respectfully submitted,

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